

claim. It is submitted that amended claims 1 and 2 satisfy the requirements of 35 U.S.C. § 112.

Claims 1, 2, 6 and 7 stand rejected under 35 U.S.C. § 102 as being anticipated by Yokogawa (U.S. Patent No. 5,891,252). Claims 3-5 and 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Yokogawa et al. Finally, claim 9 stands rejected under 35 U.S.C. § 103 as being unpatentable over Yokogawa et al and further in view of Nakano et al (U.S. Patent No. 6,155,202). These rejections are traversed as follows.

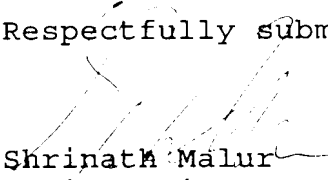
According to the present invention, the microstrip antennae (MSA) is installed in the atmosphere side of a dielectric (separation board) which divides a vacuum chamber side and atmosphere side. The atmosphere side having a pressure higher than the vacuum chamber. The generation of high-density plasma by the intense electric field in the discoidal electrode MSA edge caused by the near field is suppressed and a uniform plasma can be formed even under low voltage.

On the other hand, in Yokogawa et al, since the MSA is installed inside the vacuum chamber, a high-density plasma was generated in the vicinity of the antenna edge due to the intense electric field at the edge of the MSA by the near field of the discoidal electrode. Therefore, a uniform plasma

could not be generated in the low-pressure region. The deficiencies in the primary reference to Yokogawa et al are not overcome by resort to the remaining references. As such, it is submitted that the pending claims patentably define the present invention over the cited references.

In view of the foregoing amendments and remarks, Applicants contend that the above-identified application is now in condition for allowance. Accordingly, reconsideration and reexamination are respectfully requested.

Respectfully submitted,


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**MARKED UP VERSION OF REPLACED
PARAGRAPHS OF THE SPECIFICATION**

Pages 6 and 7, the paragraph bridging these pages from page 6, line 19 to page 7, line 7, the marked up bridging paragraph is as follows:

[And] In addition, the stable plasma can be formed even in the low-pressure and low-density plasma by using high frequency of the Ultra High Frequency band as high frequency applied in discoidal electrode 3, in this apparatus. In addition, next two contrivance did in order to form the plasma of axisymmetry which was proper for the uniformity plasma formation. The one point is MSA4, in order that axisymmetric TM01 mode like figure 3 can resonate, frequency of the UHF wave which applies in discoidal electrode 3, diameter of discoidal electrodes 3, material of dielectric disk 2 and thickness are set. In this embodiment, the frequency of UHF wave was 450MHz, diameter of discoidal electrodes 3 was 255mm, and the alumina of the 20mm thickness was used as dielectrics 2. The two-point is as follows: in order that the high frequency can be axisymmetrically supplied to the discoidal electrode 3, feed division 11 is made to be the conical state, and it becomes the structure which supplies the antenna from the conic top with electricity. And inner cylinder 12 of the quartz are let in as a metal pollution countermeasure in this apparatus. In case that inner cylinders 12 of such dielectric-

ness are let in, when the inner cylinder comes out a little is eccentric, there is a problem in which the plasma deviates from the axisymmetric. In order to solve this problem, it arranged the conducting cylinder [tubuldischargeylinders] 13 grounded in the earth potential, and make the length of the overlap part which defines it in figure 1 as an earth loop height of inner cylinders 12 and conducting cylinder [tubuldischargeylinders] 13 not less than 10mm, so that it can be perfectly prevented.

MARKED UP VERSION OF REWRITTEN CLAIMS

1. (Once Amended) A dry etching apparatus for treating a body comprising:

a chamber;

a holder in said chamber to receive a body to be treated;

means for introducing [introducing] gas into said chamber;

means for exhausting said gas in said chamber;

a power supply of Ultra High Frequency;

an electromagnetic wave radiation antenna coupled to said power supply [;] and installed in an atmosphere; and

a separation plate used as dielectric between said antenna and the inside of said chamber.

2. (Once Amended) A dry etching apparatus according to claim 1, wherein said separation plate is quartz disk [dielectric film].